Ocean Veritas Data Summary
Cruise 6/22/2010

Review Date 6/23/2010

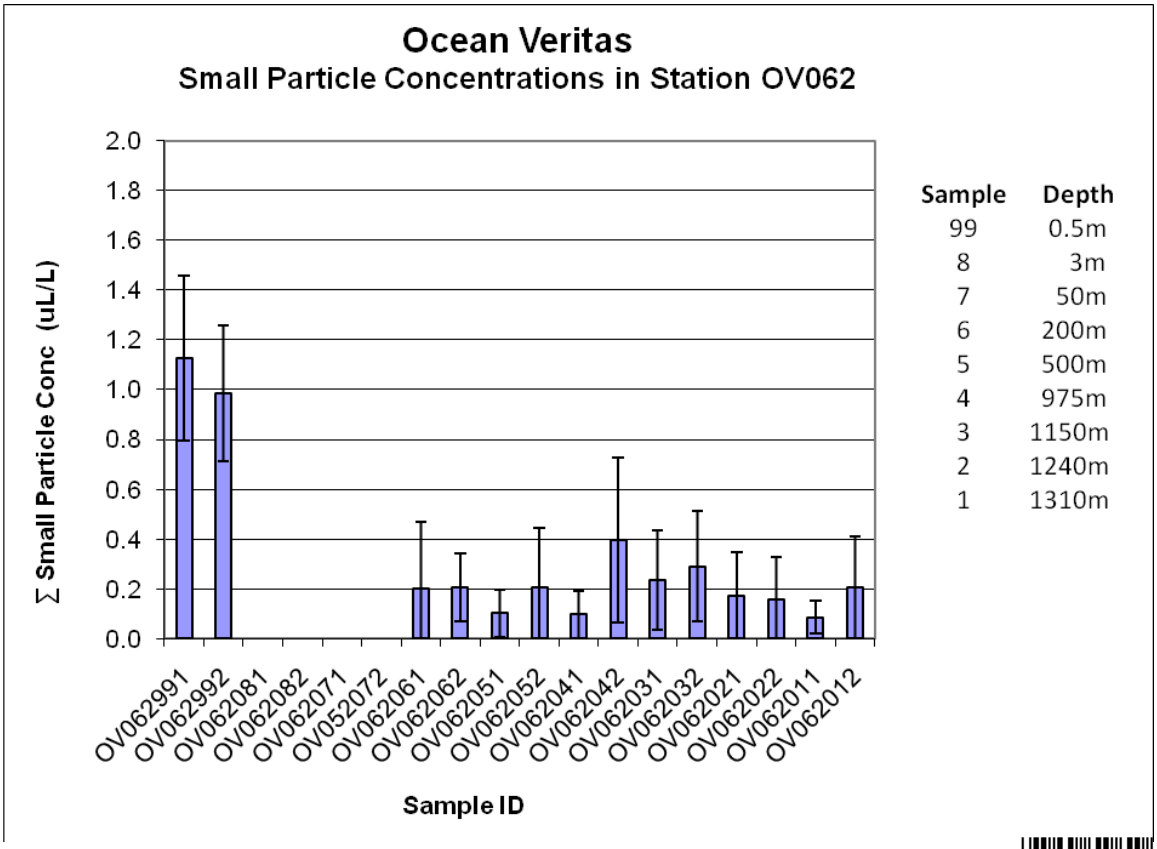
Summary:

The replacement slip ring assembly for the primary CTD still had not been delivered at time of departure. Therefore, it was decided to go to previous stations where the depth is known. Three stations were visited (OV059, OV060, and OV061). Station OV061 was much closer (1km) to the wellhead. Casts were completed at these stations with the secondary CTD system; the replacement slip ring assembly was delivered and installed after the cast at station OV061.

Science results and preliminary interpretation:

The crew received the replacement slip ring assembly after the cast of OV061 and installed it on the primary CTD system. A cast was completed at Station OV061 with the primary system to compare results, and labeled this station OV062. Station OV062 was the only cast where Niskin bottles were available (although 50m and 3m failed to fire). There was a noticeable drop in dissolved oxygen at around 500m depth, and a corresponding drop in fluorescence at the same depth. This indicates that there is a subsea oil plume at this depth, 550m.

The remaining six bottles provided samples for a limited number of LISST particulate analyses. A total of 14 LISST samples were analyzed, including duplicates. LISST analysis indicates elevated surface small particle concentrations than other water column small particle concentrations. All the subsurface small particle concentration has no distinction from each other, and no statistical difference from the background. LISST graph is shown below.



6007194

Rotifer toxicity bioassays were set up at Station OV062 for four depths (1310m, 1240m, 1150m, 500m). Rototox data was reported via an excel spreadsheet.

Following the last cast (OV062) of the primary CTD array, the system again lost connectivity and was judged to require more long-term repairs, including a long curing period for the sealing compound. At 1800h the vessel, left the site and headed for Port Fourchon.